

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of the Claims

Claims 6 – 15 were pending in this application. Claims 9 and 12-13 are cancelled by this reply. New claims 16-18 are added. Therefore, claims 6-8, 10-11, and 14-18 are pending after these amendments.

Claim Amendments

Claims 6 and 14 have been amended to clarify the invention recited. Support for the amendment can be found, for example, in the original claim 9. No new matter has been introduced by these amendments.

New claims 16-18 are added by this reply. Support for these claims, for example, may be found on page 4, lines 10-16, and page 5, lines 9-11. No new matter has been introduced by these amendments.

Obviousness-Type Double Patenting Rejection

(A) Claims 6 and 9-14 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, 4, 7, and 8 of U.S. Patent No. 6,616,992 B2.

A terminal disclaimer pursuant to 37 C.F.R. §1.321(c) is included in this Reply, disclaiming the terminal part of the statutory term of any patent granted on this application, which would extend beyond the expiration date of the full statutory term of U.S. Patent No. 6,616,992 B2. Accordingly, withdrawal of this rejection is respectfully requested.

(B) Claims 6, 9 and 12-14 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 5, and 7 of U.S. Patent No. 6,649,232 B2.

A terminal disclaimer pursuant to 37 C.F.R. §1.321(c) is included in this Reply, disclaiming the terminal part of the statutory term of any patent granted on this application, which would extend beyond the expiration date of the full statutory term of U.S. Patent No. 6,649,232 B2. Accordingly, withdrawal of this rejection is respectfully requested.

(C) Claims 6 and 10-12 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4, 16 and 17 of U.S. Patent No. 6,777,038 B2.

A terminal disclaimer pursuant to 37 C.F.R. §1.321(c) is included in this Reply, disclaiming the terminal part of the statutory term of any patent granted on this application, which would extend beyond the expiration date of the full statutory term of U.S. Patent No. 6,777,038 B2. Accordingly, withdrawal of this rejection is respectfully requested.

Rejection under 35 U.S.C. § 102

(A) Claims 6-15 were rejected under 35 U.S.C. 102(b) as being anticipated by Higuma et al. (U.S. 5,059,983). Claims 6 and 14 have been amended. To the extent that this rejection may still apply to the amended claims, it is respectfully traversed.

A recording sheet of the invention, as recited in the amended claim 6, uses silica as the filler and polyester as the binder for the ink-permeable layer. In addition, the total volume of pores having a radius of 100 nm or more and 10,000 nm or less contained in 1 g of the ink receptive layer is 0.06 cm³ or more. With these properties, the ink can be absorbed rapidly in the ink receptive layer. Consequently, the recording sheets of the invention (examples 1 & 2 in Table 3) show superior performance to that of the prior art recording sheet (comparative example in Table 3). (specification, p. 11, line 20 – p. 12, line 2)

In contrast, Higuma, as pointed out by the Examiner, describes that a binder is added to the ink-permeable layer. However, it does not disclose using a polyester resin as the binder. Furthermore, it does not teach or suggest that the total volume of the pores is made to be 0.06 cm³ or more.

With regard to the total pore volume, Examiner asserts that “mere recitation of newly discovered function or property, inherently possessed by things in the prior art, does not cause a claim drawn to those things to distinguish over the prior art.” However, the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). “In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). (emphasis in original). In the instant case, the Examiner has not provided any basis why the total pore volume, as recited in claim 6, will necessarily flow from the teaching of Higuma.

Applicant asserts that the total pore volumes as recited in claim 6 is not obvious, nor would it necessarily flow from the teaching of Higuma. As shown in Examples 1 and 2 and the Comparative Example of the present application, the total pore volume depends on the way the coating solution for the ink-permeable layer is prepared. (See Table 1; specification, p. 7). It is apparent that the pore volume is highly dependent on the types of dispersion aids (glass beads or steel beads) used and the duration of the mixing. Higuma does not teach or suggest that dispersion conditions would impact the total pore volumes, let alone teaching conditions that would produce the desired total pore volume required by claim 6.

For reasons set forth above, Higuma fails to teach or suggest limitations of the amended claim 6. Therefore, claim 6 is patentable over Higuma. Dependent claims 7-15 should be patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

(B) Claims 6-12, 14 and 15 were rejected under 35 U.S.C. 102(b) as being anticipated by Hasegawa et al. (U.S. 5,027,131). Claims 6 and 14 have been amended. To the extent that this rejection may still apply to the amended claims, it is respectfully traversed.

Hasegawa et al. discloses recording media having ink-transporting layer and ink-retaining layers comprise particles of similar sizes, $d/2 \leq x \leq d$, wherein x is the particle diameter and $d \geq 0.1 \mu\text{m}$. (Abstract). Hasegawa et al. teaches that the poor quality of the prior art recording sheet arises from the difference in the particle diameter and particle size distribution of the resin powder, and that using a resin powder having a particle diameter and particle size distribution in a certain specific range can solve this problem. (Col 3, ll. 21-27).

Hasegawa et al. does not teach or suggest the total pore volume as required by claim 6. However, the Examiner asserts that the total pore volume is inherent in the teaching of the Hasegawa et al. Again, the Examiner has not provided any basis why the total pore volume, as recited in claim 6, will necessarily flow from the teaching of Hasegawa et al.

Applicant asserts that the total pore volumes as recited in claim 6 is not obvious, nor would it necessarily flow from the teaching of Hasegawa et al. As shown in Examples 1 and 2 and the Comparative Example of the present application, the total pore volume depends on the way the coating solution for the ink-permeable layer is prepared. (See Table 1; specification, p. 7). It is apparent that the pore volume is highly dependent on the types of dispersion aids (glass beads or steel beads) used and the duration of the mixing. Hasegawa et al. does not teach or suggest that dispersion conditions would impact the total pore volumes, let alone teaching conditions that would produce the desired total pore volume required by claim 6.

For reasons set forth above, Hasegawa et al. fails to teach or suggest limitations of the amended claim 6. Therefore, claim 6 is patentable over Hasegawa et al. Dependent claims 7-12, 14 and 15 should be patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

The Applicant believes this reply to be responsive to every issue raised in the Office Action. If this belief is incorrect, or other issues arise, please do not hesitate to contact the undersigned or his associates at the telephone number listed below. This application is now considered to be in condition for allowance and favorable action in the form of a Notice of

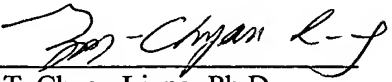
Application No.: 10/672,131

Docket No.: 03310/019002

Allowance is respectfully requested. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 03310.019002).

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Respectfully submitted,

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